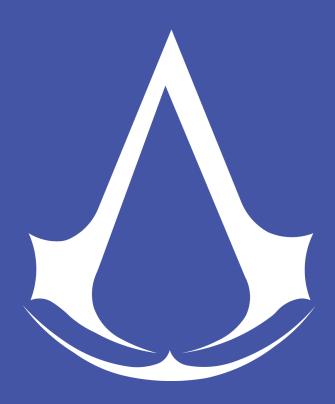
Assassins



Created by Honey Badgers

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Assassins

Our project, Assassins, is an tool for social and professional groups to play a team-building activity. We have taken the popular real-life game of *Assassins* and translated it into a mobile and smart watch application. Through this app, individuals in an organization and get to know the other members of their team in a meaningful way.

Although our primary stakeholders are small groups such as start-ups, almost anybody can use this application. Users simply need to register, find their friends, and start a game. Games can then be customized to fit the players' needs: users can shuffle targets, change kill assignments, and receive instantaneous notification changes.

Assassins hopes to change the realm of team-building activities.. Unlike any other team-building application currently in the market, Assassins allows all members of the team to participate and does not require a whole day to be set aside in order to do the acticity. We hope that this application allows individuals to get to know one another in a fun and unique way.

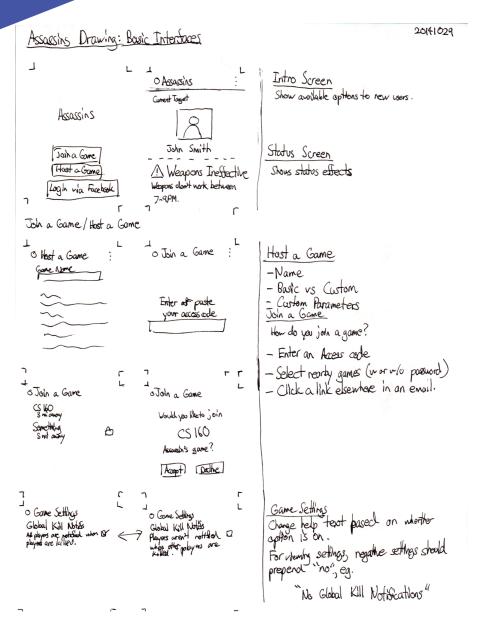
Brainstorming Process

When we began our brainstorm in The Woz and first gathered as a group, we were encouraged to think creatively about ways that someone might be able to make use of a smart watch. The opportunities proved broad and our list was a diverse set of apps that ranged from apps for your pets to dating apps to games and many more. After more ideation we finally reviewed our ideas realized that a consistent theme had appeared throughout our very different ideas. The majority of our ideas, particularly the ones we were most excited about, seemed to center on location-based interactions.

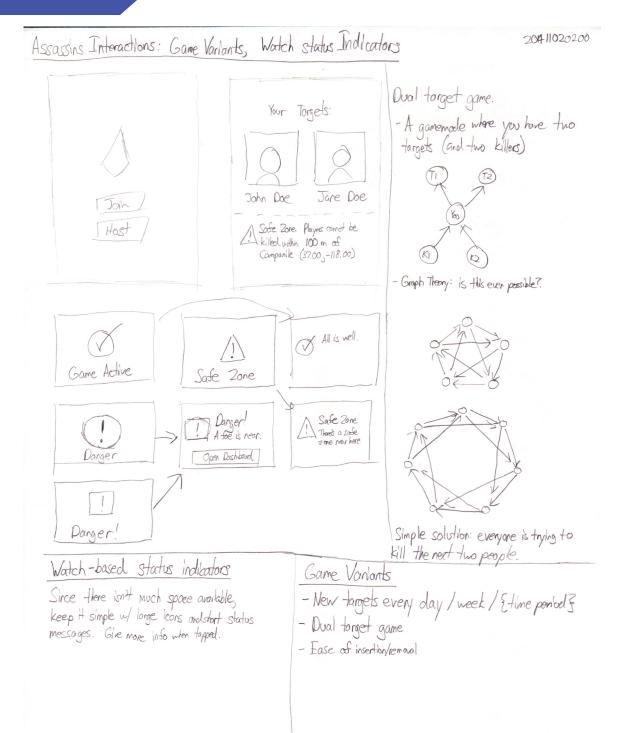
We decided to go follow where our brainstorming had taken us and narrowed our choices down to three applications: ePostIt (users tag physical locations/objects that can see tags by their friends), Assassins (a tech version of the ice breaker game), and FriendFinder (an app that alerts you when a friend you were looking for is nearby). We eventually decided to go with Assassins because in the end it was clearly the one that all of us were most excited about making.

One of the early concerns with Assassins was the fact that games inherently have a broad target audience; but fortunately Assassins is a game that is also used to build relationships and get people to know one another, which allowed us to narrow our target audience to people hoping to achieve some team building. We quickly realized many parts of the game, such as facilitating, could be accomplished much easier in an application than by a person. And we also realized that we could add new features or enhancements to the game to emphasize team building.

Sketches & Ideation



These are some of our earliest sketches that demonstrate the full functionality of the app. These are only a handful of the most important screens (Intro, Status, Host, Join, Settings). There are still not any watch sketches here, as we were still in the process of deciding what features to implement on the watch. Until we decided that we sketched out everything for the phone, as you see here. Most of the screens here are all present in our final design, except that a couple of them became quasi-screens or popups.



This next group of sketches shows both some of the ideas we bounced around as well and the first watch designs. The first two game variants that we thought up that you can see here involve a user's target. In one variant, everyone has two targets and two assassins. The idea is to get the game moving faster with more potential for kills all the time. In the other variant, you get a new target every day or week. This shuffling is to keep the game from becoming stagnant, so if you don't get held up not being able to assassinate one person. The watch sketches are of notifications the user would get when their killer or assassin is nearby.

Welcome Screen	Game Lobby	Game Start Notif
Host Host Host Home Recent Events X John Doe Killed Jane Doe 407PM X John Smith yeshoday I John Snith contested his killing!	E Woithing for goine stort Players (3) John Doe Jane Doe John Smith Kill Report (Pape) Loboy Start Gome/ Players (3) John Doe John Doe John Doe John Smith	A The game has started! Report Kill Report Kill You're rearting that you killed Jane Doe Concel OK Aport Kill Construction Very Kill John Doe has reported that he has Killedyan. No Yes Adv Settlings

These are our final design sketches. You can see that we reduced the number of phone screens from the orignal sketches, combining them to keep user flow as simple as possible. We also added a bit more functionality to the watch. We moved the notification that you have been killed and the option to accept or deny that kill onto the watch. We ultimately decided to implement these notifications on the phone as well, leaving the user to install the app on the toq watch if they choose The Toq notifications and utility were designed to enhance the game experience to create a more enjoyable game that was better integrated into a person's daily routines while the Toq-less version allowed everyone to play regardless of having a Toq. This was done so that the entire team could play with only the minimal hardware requirements.

Competitive Analysis

When we started looking into other applications that promote team building, we found that most of them encourage teams to go outside in order to complete the game and they also all require teams or groups to allocate an entire day to spend on the game. Here are our three main competitors:

Go Game: It offers multiples games that fall into 3 different categories: half-day games, longer day games, and custom games. Each game challenges the employees to use their smartphones in different ways, such as taking pictures of specific objects as part of a scavenger hunt, using the phone as a buzzer in a Family Feud-esque game, or solving missions as part of a zombie-themed disaster preparedness game.

GooseChase: a giant mobile version of a scavenger hunt, but with wacky challenges such as starting a game of follow-the-leader with 5 strangers. Each challenge is considered a mission and teams can receive points bycompleting challenges and uploading photo evidence onto a social platform. The goal is to be the team to upload a pre-decided amount of photos first or the team with the most points after an allocated time period. Its target user is company teams, although a single user is able to join public GooseChase games as well.

Moove: Moove targets teams that are trying to create a geo-located team building activity. It offers 3 games (rally, treasure hunt, and scavenger hunt) that emphasize interaction between teams through challenges. Moove has integrated multiple features, including GPS control, creative challenges, integrated WhatsApp, augmented reality, and Google Glass. While none of these features are integral to using the app, they are used to enhance the team interactions. Moove makes performing a geo-located activity easy by offering offline versions that don't require data or phone signal.

Competitive Analysis

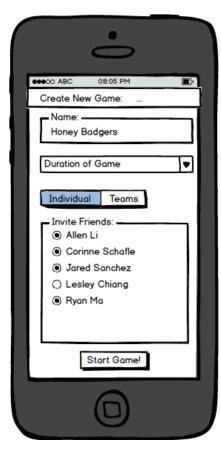
Our competition has created a lot of different versions of scavenger hunts, but besides Go Game, there isn't a lotof variation in the type of games teams can play. All other applications also cover face-to-face interactions well by assigning people into teams and having them complete challenges together. Doing this allows people to work together in order to complete a goal while also getting to know each other in a natural way. Our application is unique because it allows players to integrate the game into their everyday lives. It doesn't require a full day to be set aside in order to play. Assassins is an on-going game that builds upon day-to-day interactions between players. For example, a student group on a university campus can go to their classes and study in libraries, but at the same time, they can be actively searching for their targets and avoiding their assassin. Additionally, our application is free to all users and is thus more readily available to smaller groups that may not have the funds to purchase large-scale, expensive team-building applications.



Wireframes

Create a Game







Join a Game





Assassinate Target









Confirm Kill







Proximity Alerts









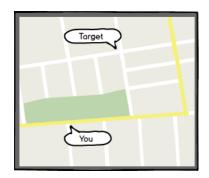


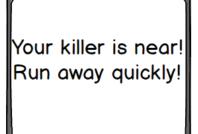
Toq Watch Notifications





You are close to your target!







Personsas

Spencer – Spencer is a 27-year-old entrepreneur looking to get involved in some exciting new fields. He enjoys a fast-paced lifestyle and easily gets bored with one project. Spencer loves to talk to people, and people likewise enjoy his company. He recently left his old job to become the CEO of a start-up he and one of his friends started. Work has been non-stop, and Spencer spends a lot of time travelling. His main goal is to grow his business and keep his work life fulfilling.

James – James is a 20-year-old college student who is majoring in Computer Science. James just landed his first job as an intern at a relatively small tech company this summer and is excited about the opportunity. James is a shy kid, but he enjoys other people's company once he gets to know them. He has a close circle of friends he spends a lot of time with but not many others. His biggest goal right now is to find what kind of career he wants to pursue and graduate with a good GPA.

Ashley – Ashley is a 21-year-old student. She is an RA in the dorms, which she has done for two semesters now. Ashley is hoping to get into medical school, and studying for her MCAT never stops. With her classes and extracurricular activities, Ashley is extremely busy. She is strong-minded person who likes to take an idea and run with it and doesn't give up on what she starts. Ashley's primary goal is to get into one of the nation's top 3 medical schools.

Senarios

Scenario1: James just walked into work on Monday for his second week of work at his new internship. He had a great time last week, but he was disappointed with how many people he got to know. He met a couple interns he has as friends now, but virtually no employees. He wants to get some of the employees so that he can learn more about what its like to work full time at this company and just gain general knowledge. James is worried though that his intro period is up and it will be hard to meet new people now. Suddenly, on of the employees on his team comes up to and says that he needs James' to help to kill one of the other employees. This sparks up a conversation and James gets to know his co-worker.

Scenario2: Ashley was upset at the end of last year as an RA when she felt like her freshman on her floor didn't bond together well enough. She blames herself for not organizing enough events for them all to get to know each other well. Unfortunately, she is so busy she doesn't see how she is going to be able to make time to organize and attend these events for her new freshman this fall. Then she finds out that someone made a mobile version of Assassins! Ashley has played Assassins and realizes it's the solution to her problem. When the freshman all move in she has them all download the app and adds everyone to a game.

Scenario3: Spencer just hired a new team of employees to join him at his start-up. He wants to get everyone to get know each other so that everyone can work comfortable with everyone else. Unfortunately, neither he nor the employees have much time. They are all busy trying to get the new business of its feet and he isn't in town enough to organize enough outings for everyone. Fortunately, one of the new hires mentions a team-building game they played at his old company. Spencer is worried that it may take too long or be too expensive, but he is pleased to learn that the app is free and takes place continuously, meaning that his new employees have a way to form strong relationships.

Contextual Inquiry

We had a difficult time conducting a true contextual inquiry given the nature of our application. Assassins doesn't occur in any one place or context, but rather it is integrated into the players' lives and takes place everywhere. This made it nearly impossible to actually observe a game of Assassins without following players around all day. Given these difficulties, we decided to focus on interviewing people who had facilitated a game of Assassin's before as well as potential users who are interested in doing team building or have previously done team building activities. We tried to ask questions to that could reveal how our application could make life easier for both of these groups of people. Here are some of the highlights from our testimonials of those interviews:

User1 - a 20-year-old university student studying Computer Science. He is heavily involved with student organizations on campus and is also a teaching assistant. He has done many team building and icebreaker activities (including Assassins) during student orientations, on the first day of class, at summer internships, and within the student groups he's involved with.

For him, the purpose behind a team-building activity is to bring together members of a certain organization, to break the ice within a group and allow everyone to get to know each other better. I asked User 1 to explain how he would plan a game of Assassins. He compiles the list of all the individuals participating in the activity and assigns them other individuals that they do not live with (i.e. roommates) as targets. However, in assigning targets, he has to double check multiple times to make sure that all assignments result in one circle/loop, so that no one ends up with their own name while other people in the game are still alive. Then as the game plays, if he is the facilitator, he has to constantly check his phone to check if someone has texted him with an assassination message. If he does receive one, he would have to wait until he receives a confirmation text from the target to ensure that both players confirm the kill. Then he has to look up who they have killed and find out who their new target is. Finally, he would have to send this name to the player. He noted although he doesn't mind doing this and reassigning targets for one person doesn't always take a lot of time, it can build up and reassigning targets for a whole game can be time consuming.

Contextual Inquiry

User2 - a mid 20's graduate of Colorado State, and is currently a Catholic missionary. She is working for a student ministry outreach called FOCUS - Fellowship of Catholic University Students. A non-profit organization based on relational ministry trying to introduce students to Jesus Christ. Their methods include small group bible studies and one-on-one mentorship or anything involving evangelization on the Cal campus. They focus on bringing students together.

We met at Starbucks to conduct the interview and talked over coffee. However, I have gone to FOCUS events and observed User2 work. At many of the events, the FOCUS leaders conduct an initial icebreaker activity and throughout the event try to incorporate team building and group activities. Throughout the semester, they attempt to keep students interested in coming and try and keep the events fun and welcoming to new students and current students. FOCUS strives create an open and friendly environment. FOCUS leaders, such as User2, spend a long time setting up activities for events. Each semester User2 attends a FOCUS retreat, where the FOCUS missionaries gather to bond and learn more about how to bring students to God. Part of these retreats is team-bonding events — and one of the games they play is Assassins. She mentioned a few problems they had encountered playing the basic version: they didn't know who was playing, they didn't know who was trying to kill who and who wasn't, they couldn't tell who had been killed, and some forgot their own targets or did not know what their targets looked like.

User3 - a mid 20's graduate of UC Davis. She currently works at a start-up that is still in stealth mode focused on improving healthcare in the US. The organization is composed of around 10 individuals ranging from early 20s to mid-30s. User3 is often in charge of coordinating between the different team members which is complicated by the difference in culture as some are engineers and others biologists or graduate students.

I focused my interview on what it takes to actually plan and create a team-building game. To plan a team-building game, User 3 started by laying out the main goals and tasks which were to have a common team-goal and to give everyone the opportunity to lead. She then proceeded to the next phase, which was to plan the goals, tasks and logistics for the game itself. These included having someone take the lead, having constant communication amongst team members, and making sure that people have a good time. This would ensure that there is an abundance of motivation and positive energy. After laying out these goals, she addressed some of the issues players may have playing Assassins. She mentioned that the goal may be too hard to achieve which may demoralize the user and if the player was quickly eliminated then they would feel left out.

Contextual Inquiry

Through our interviews were able to pick out a few problems with the game that we could improve upon. User2 pointed out some important problems that can occur if the players become confused about targets or who is playing. Our solution would allow players to check who their target is and see a picture if they are unsure about who the person is. We also identified a number of things that we can do in an application to make the facilitator's job easier. Clearly, the kill-report-confirm-reassign-notify cycle is tedious for the facilitator, and it is something we can automate and make a non-issue. Initially assigning targets so that there are no cycles is yet another difficulty for the facilitator that is as easy as simply pushing a button in our application.

Our interviews also revealed that we could make some enhancements to the traditional game so that we emphasize team building. User3 pointed out that players could become discouraged if killed too early. A discouraged team member is obviously not a good one, so we discussed how to overcome this problem. We thought about things like 2 lives and multiple targets as well as chances for redemption after death. Ultimately, we decided that giving the game facilitator the option to make the game team-based was the best way to encourage coordination and cooperation between players that would lead to positive relationships.

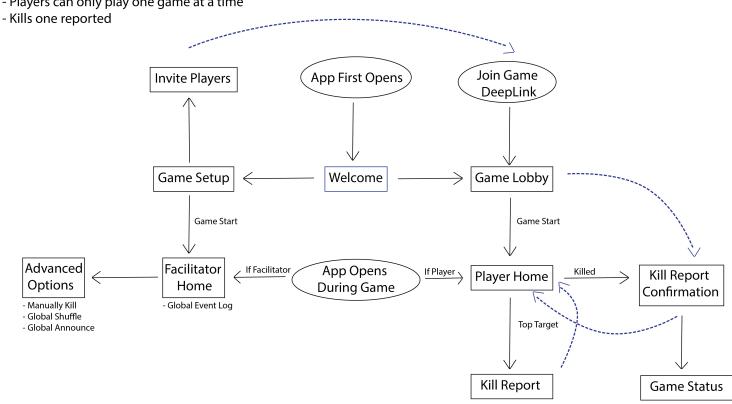
Final Design

Interaction Flowchart

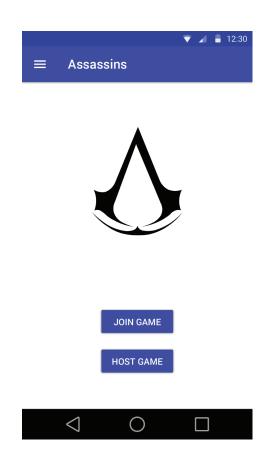
Interaction Flowchart: CS160

Basic Game Interaction Constraints:

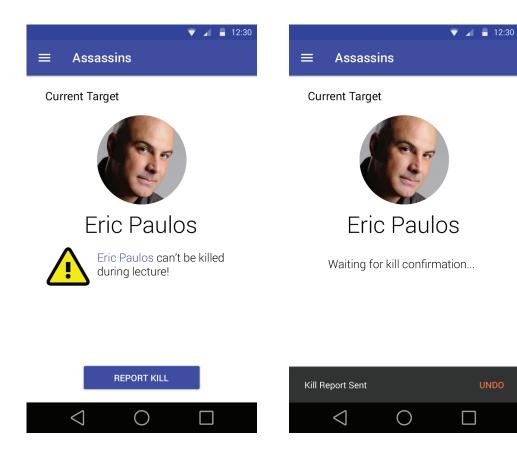
- No adding new players once they game has begun
- Players can only play one game at a time

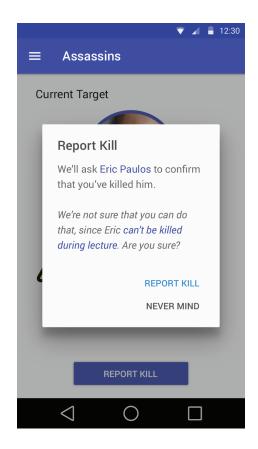


Welcome Page

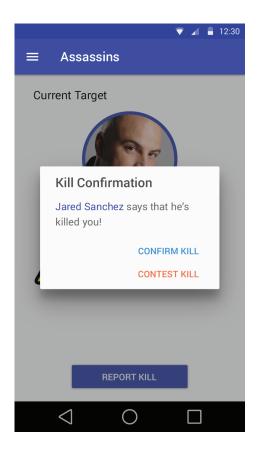


Kill Target





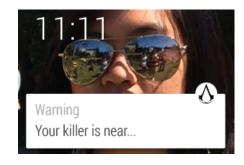
Confirm Kill



Toq Watch Interactions







Technical & Implementation Problems

Besides general technical problems like handling various screen sizes, how to implement killing another player and where to integrate the Toq Watch were the main obstacles we faced. Initially, we had a number of ideas about how to use the watch, but the one that really excited us was trying to use the watch to perform a kill. However, we also wanted to make sure the any watch interaction wasn't cumbersome and integrated seamlessly into the user experience. Unfortunately, the limitations of the Toq Watch and our access to it meant performing a kill using the watch wouldn't make much sense, so we pursued other options.

After bouncing numerous plans for how to best implement killing another player, we decided to take the option that left the most variability for the user. We decided that the people who organize and play the game should decide what kill method they want to use (there are tons of variations), so we simply incorporated a way for players to report and confirm their kills.

As for how to integrate the Toq Watch, we decided that it would be useful for two things: kill and proximity notifications, both of which can be left to the phone if the user chooses not to use the watch. Players can be notified that another player has said they killed them and in turn choose to confirm that kill or deny it on the Toq watch. They can also be notified when their target is nearby, and we considered variations in which you are alerted when your assassin is near.

In Conclusion

Our goal is to create a team-building product based on the popular real-world game of Assassins. Our version nullifies the need for a moderator by incorporating your smartphone and Toq watch. By incorporating the traditional game elements of "assassinating" an assigned target in a fight to be the last one standing, our product brings a familiar game to the smartphone. However, we take this game and greatly enhance it to both improve the overall experience of the game as well as emphasize the team-building components by incorporating alliances and conversational events to maintain personal interactions.

Features such as location-specific or automated events provide a varied game-environment to create a better experience. These are only possible in a digital space and create a more seamless, enjoyable experience for the players and facilitators than would be possible without our application.

Beyond improving the game itself, we have emphasized team building by making games team based, meaning that players must collaborate with other members of their team to kill another player. We are confident that Assassins provides something that is not currently available on the market. Other apps that look to promote team building do not address the need for continued interaction between two people if they are going to establish a really good relationship. All of our competitors have users do something together for a day, but after that day there is nothing that continues to encourage people to coordinate. Assassins, on the other hand, is a game that integrates into a player's life, meaning that it is an ongoing process that prompts multiple interactions over a period of time. We believe that this is the main value that we provide to users that has previously been left unsatisfied.